tate of Hawaii DEPARTMENT OF LAND AND NATURAL RESOURCES Engineering Division Honolulu, Hawaii 96813

May 24, 2013

Board of Land and Natural Resources State of Hawaii Honolulu, Hawaii

Request Authorization to Select Consultants and Authorize the Chairperson to Negotiate and Execute Agreements with Consultants, Contractors and/or Government Agencies as Necessary to Administer HRS Chapter 179D, Entitled the Dam and Reservoir Safety Act of 2007

The Engineering Division (Division) desires to select and execute agreements with consultants, contractors and/or government agencies as necessary for the below listed projects and services to properly implement and administer the Dam and Reservoir Safety Act of 2007, HRS Chapter 179D. Funding for this work will be provided primarily from the Dam and Reservoir Safety Special Fund and supplemented by a Federal Department of Homeland Security, National Dam Safety Program Grant. This authorization will support the following projects:

- 1. Modifications to the Dam Inventory Database System

 Budget \$80,000

 Project will be to provide updates and modifications to the Dam Safety Dam Inventory

 Database System. The Division currently utilizes this system to maintain dam inventory data
 and would like to expand the system to assist in permitting, inspections and compliance.

 Updates to software and the existing server hardware have been procured, however need to
 be installed.
- 2. Dam Failure Mapping and Hazard Assessment

 The Division desires to contract with the Pacific Disaster Center (PDC), under management by the Research Corporation of the University of Hawaii (RCUH) to conduct dam failure model simulations of selected dams statewide, along with a detailed hazard assessment of the modeled area and evacuation mapping documentation. The Division has previously worked with the PDC to provide dam failure modeling of almost all regulated dams statewide. Additional structures have been identified for possible inclusion into the regulatory program and will be evaluated to determine their appropriate hazard classification.
- 3. Dam Safety Water Level and Video Monitoring System

 Project will consist of the installation of various reservoir water level and video monitoring instrumentation and related supporting equipment, software and applications to monitor and record data from selected reservoirs. We anticipate the award of separate contracts based on type of service and locations which are preliminarily proposed as:
 - A. Water Level and Monitoring System Kauai and Oahu

Budget \$ 100,000

B. Water Level and Monitoring System Maui and Hawaii

Budget \$ 100,000

C. Video Monitoring System, Statewide

Budget \$ 100,000

May 24, 2013 Page 2 of 2

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Total Budget \$ 450,000 4. Dam Safety Engineering Technical Services The Division utilizes consultant services for inspection and assessment of existing dams and to assist in the technical review of proposed dam safety construction, alteration and removal permit applications and certificate of approval to impound permit applications and related dam safety technical assistance. Many of these permits require additional technical services and resources that exceed those currently available on staff. The following is a listing of preliminary projects proposed, which may be revised based on current need:

A. Dam Safety Inspections and Assessment Services	Budget \$100,000
B. Dam Safety Permit Reviews	Budget \$100,000
C. Spillway and Outlet Assessments	Budget \$200,000
D. Dam Safety Crest Surveys	Budget \$ 50,000

All procurements will be made in accordance with the State Procurement Code, Chapter 103D, Hawaii Revised Statutes.

RECOMMENDATIONS:

- 1. That the Board of Land and Natural Resources (Board) authorize the selection of consultants or contractors for the projects indicated and authorize the Chairperson to negotiate and execute agreements, subject to Governor's approval, and review and approval as to form by the Department of the Attorney General.
- 2. That the Board authorize the Chairperson, subject to available funding and review and approval as to form by the Department of the Attorney General, to enter into supplemental contracts to address unforeseen conditions and sign the necessary documents to implement the additional work.

Respectfully submitted,

Chief Engineer

APPROVED FOR SUBMITTAL:

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WILLIAM J. AILA, JR., Chairperson Board of Land and Natural Resources